

WHAT IS CLAIMED IS:

1. An apparatus for manufacturing an artificial nail, comprising:
 - a mold comprising two surfaces configured to move relative to each other, wherein when positioned closely the two surfaces define a cavity shaped
5 an artificial nail with a hole adapted to inject a material into the cavity therethrough; and
 - a film supplier arranged near the mold such that a film supplied by the film supplier is adapted to be placed between the two surfaces and to isolate the two surfaces.
- 10 2. The apparatus of Claim 1, wherein one of the two surfaces is concave and the other is convex.
3. The apparatus of Claim 2, wherein the injection hole is configured such that the material injected through the hole is adapted to contact the convex surface rather than the concave surface when the film is located between the two surfaces.
- 15 4. The apparatus of Claim 2, wherein the injection hole is configured such that the material injected through the hole is adapted to fill a space formed between the convex surface and the film.
5. The apparatus of Claim 1, wherein the film supplier comprises a film feed roll feeding a film to the mold.
- 20 6. The apparatus of Claim 5, further comprising a take-up roll adapted to receive the film located across the mold from the feed roll.
7. The apparatus of Claim 1, wherein the film adapted to be supplied by the film supplier comprises a base film and a transfer portion.
8. The apparatus of Claim 7, wherein the transfer portion is formed on a surface
25 of the base film and adapted to be removed from the surface of the base film.
9. The apparatus of Claim 8, wherein the transfer portion comprises a printed pattern layer.
10. The apparatus of Claim 9, wherein the transfer portion further comprises an adhesive layer.
- 30 11. The apparatus of Claim 9, wherein the transfer portion further comprises a protective layer.

12. The apparatus of Claim 9, wherein the transfer portion further comprises a parting layer contacting the surface of the base film, and wherein the parting layer is adapted to facilitate removal of the transfer portion from the surface of the base film.

5 13. The apparatus of Claim 8, wherein the transfer portion comprises a protective layer, a printed pattern layer and an adhesive layer stacked in order beginning from the base film.

14. The apparatus of Claim 1, the mold comprises a plurality of a set of the two surfaces.

15. A method of manufacturing an artificial nail, the method comprising:
10 providing a mold comprising two surfaces configured to move relative to each other;
placing a film comprising a printed pattern layer between the two surfaces;
moving at least one of the two surfaces toward each other, whereby the
15 two surfaces define a cavity shaped like an artificial nail with a hole, while keeping the film between the two surfaces, wherein the film isolates the two surfaces;
injecting a fluid resin through the hole into the cavity; and
solidifying the resin in the cavity.

20 16. The method of Claim 15, wherein the fluid resin injected into the cavity contacts the film and one of the two surfaces.

17. The method of Claim 15, wherein one of the two surfaces is concave and the other is convex.

25 18. The method of Claim 17, wherein the fluid resin injected into the cavity fills a space formed between the convex surface and the film.

19. The method of Claim 15, wherein the film comprises a base film and a transfer portion.

20. The method of Claim 19, wherein the base film is made of polyethylene terephthalate (PET) resin.

30 21. The method of Claim 19, wherein the transfer portion is formed on a surface of the base film and adapted to be removed from the surface of the base film.

22. The method of Claim 19, wherein the transfer portion comprises a printed pattern layer.

23. The method of Claim 21, wherein the transfer portion further comprises a layer adapted to contact the resin.

5 24. The method of Claim 23, wherein the layer contacting the resin contains a material having an adhesive property above room temperature.

25. The method of Claim 24, wherein the material at a temperature above about 200 °C.

10 26. The method of Claim 21, wherein the transfer portion further comprises a protective layer.

27. The method of Claim 21, wherein the transfer portion further comprises a parting layer contacting the surface of the base film and wherein the parting layer is adapted to facilitate removal of the transfer portion from the surface of the base film.

15 28. The method of Claim 19, wherein the transfer portion comprises a protective layer, a printed pattern layer and an adhesive layer stacked in order beginning from the base film.

29. The method of Claim 15, wherein the fluid resin comprises a thermoplastic resin.

20 30. The method of Claim 29, wherein the thermoplastic resin is selected from the group consisting of acrylonitrile butadiene styrene (ABS), polystyrene (PS), polycarbonate (PC), acrylonitrile styrene (AS), poly (methyl)metracylate (PMMA), and polypropylene (PP).

31. The method of Claim 15, wherein the resin is injected at a temperature from about 200 °C to about 300 °C.

25 32. The method of Claim 31, wherein the resin is injected at a temperature from about 220 °C to about 260 °C.

33. The method of Claim 15, wherein the resin is injected at a pressure from about 500 kg/cm² about 1,200 kg/cm².

30 34. The method of Claim 34, wherein the resin is injected at a pressure from about 800 kg/cm² about 1,000 kg/cm².

35. The method of Claim 15, wherein placing the film between the two surfaces comprises feeding the film from a film feed roll.

36. The method of Claim 35, wherein the feeding comprises taking up the film with a take-up roll located across the surface from the film feed roll.

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